

WHAT IS CLAIMED IS:

1. An optical disc drive comprising
an objective lens for focusing light on an optical disc
with five or more data storage layers that are stacked one
upon the other and

a tilt control mechanism for controlling a tilt angle to
be defined between the optical axis of the light and a normal
to the data storage layers,

the optical disc drive reading and/or writing data
from/on a selected one of the data storage layers of the
optical disc by focusing the light on the selected data
storage layer,

wherein the numerical aperture NA of the objective lens
is defined so as to fall within the range of $1.3009 \times D^3 - 2.9315$
 $\times D^2 + 2.3133 \times D - 0.0502$ to $1.3009 \times D^3 - 2.9315 \times D^2 + 2.3133 \times D +$
 0.2028 , where D is a distance (mm) from a light incident side
of the optical disc to the deepest one of the data storage
layers, which is located most distant from the light incident
side.

2. An optical disc drive comprising
an objective lens for focusing light on an optical disc
with five or more data storage layers that are stacked one
upon the other and

a tilt control mechanism for controlling a tilt angle to